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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/989,910 | 11/20/2001 | Richard B. LeVine | ECD-0003 | 1783 |

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EXAMINER

CHAI, LONGBIT

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| ART UNIT | PAPER NUMBER |
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2131

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 09/989,910 | Applicant(s) LEVINE ET AL | |
| | Examiner Longbit Chai | Art Unit 2131 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20, 24-27, 35-42, 44 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 24-27, 35-42, 44 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 21-23, 28-34, 43, 46 and 47 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/20/2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Election / Restrictions

On October 13, 2005, discussed with attorney over the phone regarding restriction requirement resulted from the amendment filed on 10/3/2005. Attorney elects the first group (Group 1) without traverse from the following two groups.

This application contains claims directed to the following patentably distinct claimed inventions. Restriction to one of the following invention is required under 35 U.S.C 121:

- I. (Group 1) Claims 1 and 24 (and its associated dependent claims 2 – 20, 35 – 42, 25 – 27 and 44 – 45) drawn to the prevention of unauthorized use of digital content data to be transferred from a first system to a second system emphasizing on the authentication technique such as determining whether the transaction data of the second system indicates whether the second system is a valid recipient of the archive and further modifying the archive using the transaction data of the second system that identifies the second system to generate a modified archive, classified in class 713, subclass 168.
- II. (Group 2) Claims 21, 28 and 32 (and its associated dependent claims 22 – 23, 29 – 31, 33 – 34, 43, 46 and 47) drawn to a more

specific data processing protection technique for unauthorized use,
classified in class 713, subclass 193.

Inventions I and II are related as subcombination disclosed as usable together in a single combination. The subcombination is distinct from the combination and the subcombinations are distinct from each other if they are shown to be separately usable. The following case instantiates:

Invention II has separate utility directed to a more specific data processing protection technique for unauthorized use by monitoring at each process and initiating a nondeterministic defense action to obfuscate the cause of the defense action upon the occurrence of unauthorized use of a digital content.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purpose as indicated is proper.

Examiner acknowledges that Applicant has elected Group 1 and as such this Office action only addresses the claimed inventions of Group 1.

DETAILED ACTION

1. Claims 1 – 34 have been presented for examination. Claim 10 has been canceled; claims 1, 13 and 24 have been amended; and new claims 35 – 47 have been added in an amendment filed 10/3/2005. Claims 21 – 23, 28 – 34, 43, 46 and 47 have been withdrawn due to the restriction requirement. Therefore, presently pending claims for this instant application are 1 – 9, 11 – 20, 24 – 27, 35 – 42 and 44 – 45.

Response to Arguments

2. Applicant's arguments filed on 10/3/2005 with respect to instant claims have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 9, 11, 14, 18, 19, 35, 37 – 40 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Downs et al. (Patent Number: 6226618).

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As per claim 1, Mooney teaches a method for preventing unauthorized use of digital content data to be transferred from a first system to a second system comprising:

locating an archive of a digital content data at the first system (Downs: Column 51 Line 29 – 37);

determining transaction data of the second system that identifies the second system (Downs: Column 76 Line 51 – 58 and Column 76 Line 12 – 13);

determining whether the transaction data of the second system indicates whether the second system is a valid recipient of the archive (Downs: Column 76 Line 31 – 50);

modifying the archive using the transaction data of the second system that identifies the second system to generate a modified archive (Downs: Column 76 Line 6 – 8, Column 76 Line 51 – 58 and Column 9 Line 16 – 18); and

transferring the archive from the first system to the second system if the second system is a valid recipient (Downs: Column 12 Line 8 – 10).

As per claim 2, Downs teaches if the second system is not a valid recipient, transferring the archive from the first system to the second system, the operation of the archive failing in the second system (Downs: Column 3 Line 52 – 55).

As per claim 3, Downs teaches the first system comprises a hard media and wherein the second system comprises a computer system (Downs: Column 51 Line 32 – 37).

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As per claim 4, Downs teaches the first system comprises a first computer system and wherein the second system comprises a second computer system (Downs: Column 3 Line 52 – 55).

As per claim 5, Downs teaches the first and second computer systems are remotely located. (Downs: Column 70 Line 18 – 20).

As per claim 6, Downs teaches determining transaction data of the second system comprises determining a data element selected from the group of data elements consisting of: transaction identification; system configuration information; manufacturer, serial number, and physical properties (Downs: Column 76 Line 12 – 67).

As per claim 7, Downs teaches determining transaction data of the second system comprises downloading an analysis tool to the second system, and running the analysis tool to examine the second system and to generate a unique identifying value that identifies the second system as the transaction data (Downs: Column 76 Line 6 – 8, Column 11 Line 40 – 54 and Column 9 Line 36 – 38).

As per claim 8, Downs teaches the unique identifying value is deposited in the archive that is transferred to the second system (Downs: Column 76 Line 6 – 8).

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As per claim 9, Downs teaches the unique identifying value is encrypted and interleaved with the digital content data in the transferred archive (Downs: Column 27 Line 37 – 48).

As per claim 11, Downs teaches increasing a memory allocation of the archive before modifying the archive with the transaction data (Downs: Column 76 Line 6 – 8).

As per claim 14 and 18, Downs teaches before transferring the archive, removing a plurality of original data segments from memory locations of the archive and storing false data at the memory locations (Downs: Column 76 Line 6 – 8: the watermark is interpreted as false data and when executed as machine instructions would cause the system improperly functioned).

As per claim 19, Downs teaches the second system, following transfer of the archive, replaces the false data with the original data segments if the second system is a valid recipient (Downs: Column 11 Line 44 – 45: only the valid recipient can process the watermark properly to restore the original data segments).

As per claim 35, Downs teaches a watermark is deposited in the archive that is transferred to the second system (Downs: Column 76 Line 6 – 8).

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As per claim 37, Downs teaches the false data comprises a machine instruction which is not properly functional when processed (Downs: Column 76 Line 6 – 8: the watermark is interpreted as false data and when executed as machine instructions would cause the system improperly functioned).

As per claim 38, Downs teaches aborting transfer of the archive from the first system to the second system if the second system is an invalid recipient of the archive (Downs: Column 76 Line 31 – 38).

As per claim 39, Downs teaches the transfer of the archive is aborted immediately if the second system is an invalid recipient of the archive (Downs: Column 76 Line 31 – 38).

As per claim 40, Downs teaches the transfer of the archive is aborted in an indirect manner if the second system is an invalid recipient of the archive (Downs: Column 76 Line 42).

As per claim 42, Downs teaches the second system receiving the transferred archive and de-interleaving or decrypting the archive using the transaction data of the second system so that the digital content data can be executed by the second system (Downs: Column 27 Line 37 – 48 and Column 11 Line 50 – 52).

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4. Claims 24, 25 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Mooney et. al (PN: 6351813).

As per claim 24, Mooney teaches a method for preventing unauthorized use of digital content data hosted on a system comprising:

determining whether an unauthorized use of the digital content data is in progress (Mooney: see for example, Column 5 Line 31 – 40 and Column 1 Line 59 – Column 2 Line 12: the attempt to retrieve the key for encryption / decryption the digital data need to be authenticated, as taught by Mooney, to prevent unauthorized access); and

in the case where an unauthorized use is determined, initiating a defense action by disabling only an input device in associated with the unauthorized use (Mooney: see for example, Column 5 Line 48 – 50).

As per claim 25, Mooney teaches disabling an input device comprises disabling a combination of keystrokes at a keyboard input device (Mooney: Column 5 Line 48 – 50: the input device is indeed associated with the unauthorized use).

As per claim 27, Mooney teaches the input device comprises a keyboard or a mouse (Mooney: Column 5 Line 48 – 50: the input device is indeed associated with the unauthorized use).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney et al. (PN: 6351813), in view of Bean et al. (PN: 6460023).

As per claim 44, Mooney does not disclose expressly the input device is only disabled in an authorized interface window when the target focus for the input device is an unauthorized application associated with the unauthorized interface window.

Bean teaches the input device is only disabled in an authorized interface window when the target focus for the input device is an unauthorized application associated with the unauthorized interface window (Mooney: Column 5 Line 48 – 54; Bean: Column 5 Line 66 – Column 6 Line 1 and Column 2 Line 20 – 21).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bean within the system of Mooney because (a) Mooney teaches the security compartments are locked out to prevent the access from an unauthorized user to the system according to a specific security level complied with the given site's own security policy (Mooney: Column 5 Line 48 – 54) and (b) Bean teaches an enhanced and scalable authorization security system that each of

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the interface window can be counted as only a single authorized use of the content (Bean: Column 2 Line 20 – 21 and Column 5 Line 66 – Column 6 Line 1).

As per claim 26 and 45, the claim limitations are met as the same reasons as that set forth in rejecting claim 44.

6. Claims 12, 13 and 15 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (Patent Number: 6226618), in view of Horiike (PN: 6744905).

As per claim 12 and 16, Downs does not disclose expressly creating a map of the increased memory allocation.

Horiike teaches creating a map of the increased memory allocation (Horiike: Column 5 Line 55 – Column 6 Line 8).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Horiike within the system of Downs because (a) Downs teaches a secure content delivery system by using watermark techniques (Downs: Column 51 Line 29 – 39) and (b) Horiike teaches a novel solution of an image processing apparatus using the watermarking techniques (Horiike: Column 2 Line 35 – 36 and Column 5 Line 55 – Column 6 Line 8).

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As per claim 13, 15 and 17, Horiike teaches storing the map in the archive, or in memory locations of the second system, or in the first system (Horiike: Column 5 Line 55 – Column 6 Line 8).

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (Patent Number: 6226618), in view of Cialelli et al. (Patent Number: 6236727).

As per claim 20, Downs does not disclose expressly the second system replaces the false data by the original data segments immediately prior to execution of the corresponding memory locations, and replaces the original data by the false data immediately following execution of the corresponding memory locations.

Cialelli teaches the second system replaces the false data by the original data segments immediately prior to execution of the corresponding memory locations, and replaces the original data by the false data immediately following execution of the corresponding memory locations (Cialelli: Column 2 Line 44 – 66: These are the scrambled, decrypted and re-scrambled techniques as taught by Cialelli).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cialelli within the system of Downs because(a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Cialelli teaches enhancing the security for digital content data by using extensive encryption in order to protect the data against unauthorized access (Cialelli: see for example, Column 1 Line 47 – 51).

8. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (Patent Number: 6226618), in view of Mooney et. al (PN: 6351813).

As per claim 36, Downs does not disclose expressly the unique identifying value is used to create a system unique encryption key.

Mooney teaches the unique identifying value is used to create a system unique encryption key (Mooney: Column 5 Line 27 – 35).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Mooney within the system of Downs because(a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Mooney teaches enhancing security system for protecting and controlling access to data content using a system of security keys (Mooney: Column 1 Line 10 – 14).

9. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. (Patent Number: 6226618), in view of Paulson et. al (PN: 5585585).

As per claim 41, Downs does not teach if it is determined that the second system is an invalid recipient of the archive, further modifying the archive to insert executable data into the archive that causes an exit, an error condition, or communication to

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another system entity which begins a cascading exit process, in the second system, and transferring the further modified archive to the second system.

Paulson teaches if it is determined that the second system is an invalid recipient of the archive, further modifying the archive (Paulson: Column 5 Line 57 – 62) to insert executable data (Paulson: Column 6 Line 12) into the archive that causes an exit (Paulson: Column 6 Line 12 – 18), an error condition, or communication to another system entity which begins a cascading exit process, in the second system, and transferring the further modified archive to the second system.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Paulson within the system of Downs because (a) Downs teaches a secure content delivery system by using encryption techniques (Downs: Abstract) and (b) Paulson teaches providing an enhanced data protection algorithm to protect repertoire data content from unauthorized access (Paulson: Column 5 Line 57 – 59).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LBC

Longbit Chai
Examiner
Art Unit 2131


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